

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name	Medical Statistics
Course number	STAT3323
Faculty	
Department	
Course type	Major Needs
Course level	3
Credit hours (theoretical)	3
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

<p>1 - To refresh and deepen basic knowledge on basis statistical methods for the analysis of data from health care research project. Emphasis will be given to the interpretation and understanding of these statistical methods. To support the statistical calculations the software package SPSS will be used. The course prepares participants also for a more in-depth and detailed course on longitudinal data analysis (mixed models).</p>
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Intended Learning Outcomes

<p>Knowledge and Understanding</p> <ul style="list-style-type: none"> * Understand and manage data and perform simple statistical analyses * Understand how a typical statistics program works
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Course Contents

<ol style="list-style-type: none"> 1 - Sampling a population 2 - Introduction 3 - Types of data 4 - Describing data: summary statistics and graphical techniques 5 - Estimation and confidence intervals 6 - Statistical inference: testing hypotheses and interpreting P values 7 - Contingency tables: odds ratios and the χ^2 test 8 - Non-parametric tests 9 - Multiple comparisons 10 - Correlation and regression 11 - Diagnostic consistency 12 - Sample size calculations 13 - Bias and confounding 14 - Repeated measures 15 - Causation 16 - Critical appraisal of published research

Teaching and Learning Methods

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| 1 - Lectures |
| 2 - applications |

Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
midterm	1 hour	40 %
final exam	2 hours	50 %
homework		10 %

Books and References

Course note	notes
Essential books	medical statistics, Michael Harris and Gordon Taylor ,2003